

20000110.ba v02_n774.bam.20000110

>From ???@??? Mon Jan 10 11:10:40 2000 -0600
Date: Mon, 10 Jan 2000 11:07:50 CST
From: Old Tube Radios <boatanchors@theporch.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: BOATANCHORS digest 2774
Message-Id: <20000110171312.990AE27407@devel43.theporch.com>

BOATANCHORS Digest 2774

Topics covered in this issue include:

- 1) Re: VT fuze - again
by Jerry Proc <jproc@idirect.com>
- 2) Mystery Microphone
by David Stinson <arc5@ix.netcom.com>
- 3) Re: VT fuze - again
by polepeeg@aaa4rm.ba-watch.org (Marty's Refl. Drop)
- 4) Re: Mystery Microphone
by David Stinson <arc5@ix.netcom.com>
- 5) Re: Capacitor Leakage - How much?
by Arden Allen <gumbear@pacbell.net>
- 6) Help On National HFS Receiver
by Liles and Naomi Garcia <naomi@ftconnect.com>
- 7) Re: Q: Restoration of finish - bakelite knobs?
by "Barry L. Ornitz" <ornitz@tricon.net>
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- 9) Son of VT-F / Direct conversion?
by polepeeg@aaa4rm.ba-watch.org (Marty's Refl. Drop)
- 10) Collins S Line For Sale
by KB9VU@aol.com
- 11) Re: Son of VT-F / Direct conversion?
by Arden Allen <gumbear@pacbell.net>
- 12) Re: VT fuze - again
by "Sandy W5TVW" <ebjr@i-55.com>
- 13) Re: Q: Restoration of finish - bakelite knobs?
by David Jordan <wa3gin@erols.com>
- 14) RE: Q: Restoration of finish - bakelite knobs?
by Merz Donald S <merz.ds@mellon.com>
- 15) R390A FS
by KB9VU@aol.com
- 16) Re: Capacitor Leakage - How much?
by Paul Monroe <pmonroe@inwave.com>
- 17) Loveland Colorado Hamfest Report
by Paul Bernhardt <bern@ppdu.nrl.navy.mil>
- 18) BC-611 IF Transformer Problems

by "ROBERT W. DOWNS" <RWDowns_WA5CAB@compuserve.com>
19) Re: VT-fuze - again
by "ROBERT W. DOWNS" <RWDowns_WA5CAB@compuserve.com>
20) Re: Q: Restoration of finish - bakelite knobs?
by "Andrew Emmerson" <midshires@cix.co.uk>

Message-ID: <387969A1.F03548C2@idirect.com>
Date: Mon, 10 Jan 2000 00:09:54 -0500
From: Jerry Proc <jproc@idirect.com>
MIME-Version: 1.0
CC: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: VT fuze - again
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
To: Old Tube Radios <boatanchors@theporch.com>

Hi Folks.

Several years ago, I read an article on WWII VT fuzes. Although the frequency of operation was not mentioned, I do remember reading that the tiny vacuum tubes in the fuse had to withstand 10,000 G's when the shell was fired. That means that the interelectrode spacing had to be very small and the elements well supported. What appears to be an serious problem operating condition for the vacuum tube was actually a solution for safely powering the fuze.

The battery consisted of two separate sections insulated by a thin piece of glass. Under normal conditions the two electrolytes were isolated from each other. Upon firing, the glass barrier would shatter and the electrolytes would combine thus providing power for the fuze once the shell was a safe distance from the gun. It all happens in a split second. If it wasn't this way, the steel from the barrel of the gun would trip the fuse.

That article I read also mentioned that the fuze consisted of a transmitter and receiver. The closeness of the fuze to the target effectively loaded down the oscillator and would lower its frequency much in the same way a MOPA circuit will alter frequency if the load changes. This frequency change was detected by a receiver thus detonating the fuze. Perhaps it is the delta change in frequency which is incorrectly being referred to as Doppler shift in the article which Hue read.

In a naval context, I have seen the terms fuse and fuze used interchangeably. Just so I don't get things mixed up in my head, I refer to "fuze" for things that explode and "fuse" for objects which protect electrical circuits :-)

Regards,
Jerry Proc VE3FAB jproc@idirect.com
Web: www3.sympatico.ca/hrc/haida
HMCS HAIDA Historic Naval Ship, Toronto Ontario

Message-ID: <38796BD1.769AD014@ix.netcom.com>
Date: Sun, 09 Jan 2000 23:19:14 -0600
From: David Stinson <arc5@ix.netcom.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Mystery Microphone
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

If you know anything about old military microphones,
please take a look at these:

<http://www.arc5.com/new/mike1.jpg>

<http://www.arc5.com/new/mike1.jpg>

There are no markings on the outside of the mike.
The element inside is marked "American Microphone Company JUL 1945."

There is no push-to-talk switch or handle. The mike fits
comfortably in the hand.

Anyone have a clue about this mike?

Thanks,
Dave S.

Date: Mon, 10 Jan 2000 00:28:01 -0500
From: polepeeg@aa4rm.ba-watch.org (Marty's Refl. Drop)
Message-Id: <200001100528.AAA09422@aa4rm.ba-watch.org.>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: VT fuze - again

Hue the subject emerged 2 yrs back & some kind listmember sent me a xerox
of a 9/96 QCWA journal art'l by Bob Dennison, W2HBE.

I've just re-read it & it's superbly, yes SUPERBLY, done. Gives sample
algebra to compute doppler shift based on 500mph closing V at 160mhz.

Hue,there's you answer. 160mhz. & Doppler shift is 238cps.

You're correct in that it was "steady-running CW radar" who's osc. was both the xmtr and the INJECTION SIG OF A DIRECT-CONVERSION RX. Don't criss-cross this with a superregen. Most ingenious.

Danged if I don't have one of the P-fuze's plastic antenna nosecones in my collection! Has RCA meatball on it.

Electronics package was layed out linearly in a blanket then rolled into a cylinder & potted in the "fuze's next stage." That's why you'll probably never see the innards.

Amazing story was fuze 1st used in battle of Bulge & arty shells were set to go off 30' fm any obstacle. This meant tops were taken out of the axis' forest trees leaving no hiding places!

Next was DDS Hadley that took down 100 kamikazis with her 5" VT AAs in 5/45. She sustained only 2 hits.

Things so secret that by the Gulf war only 6 nations had 'em & only ~'96 was a protective system called "Shortstop" under initial order.

You should hear the story of the batteries that powered it.

Glad to make you a copy

Marty

PS RAILROAD FLARES HAVE BEEN CALLED 'FUZEES' FOR OVER A CENTURY. GO FIGGUR

START A NEW THREAD - DARE YA!

Message-ID: <38796E65.73B8ACA0@ix.netcom.com>
Date: Sun, 09 Jan 2000 23:30:13 -0600
From: David Stinson <arc5@ix.netcom.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Mystery Microphone
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

oops
second URL is:

<http://www.arc5.com/new/mike2.jpg>

Date: Sun, 09 Jan 2000 21:31:15 -0800
From: Arden Allen <gumbear@pacbell.net>
Subject: Re: Capacitor Leakage - How much?
To: Old Tube Radios <boatanchors@theporch.com>
Message-id: <0F0300EFGU14QI@mta4.snfc21.pbi.net>
MIME-version: 1.0
Content-type: text/plain; charset=Default
Content-transfer-encoding: 7bit

Hi Denis;

> Can someone point me toward a reference source for
> nominal/acceptable leakage current values for capacitors? Now

When you get a manual for your T0-6 your question will be answered. The instructions give you good info on determining what's a proper limit for leakage testing which is based on cap performance of the time. Today's film caps register no discernable leakage on the meter. I don't like any vintage caps that have less than 5000 megohms of resistance unless they are in a low impedance circuit like a cathode resistor bypass where leakage has no effect. One must also keep in mind that capacitor leakage has a positive temperature coefficient, as the cap warms up the leakage current increases and by the same token the leakage resistance decreases. If you are concerned about temperature warm the capacitor up with a hair dryer while checking its leakage.

Arden Allen KB6NAX Vallejo, CA gumbear@pacbell.net

Message-ID: <38797830.85EB13B9@ftconnect.com>
Date: Sun, 09 Jan 2000 22:12:00 -0800
From: Liles and Naomi Garcia <naomi@ftconnect.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Help On National HFS Receiver
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Good evening Everybody,

I posted a request for some information on a National HFS Receiver a few days ago, and I did not get any replies yet. Also, my posting did not reflect back to my email account--I do not know if this is normal or not. Anyway, if this posting goes to the list OK, then it should end up in my email. Can anybody give me an idea what the National HFS is, and what it was used for?? This particular receiver has a vibrator power

supply with it. I would like to get it from my friend, but I told him that I would let him know if the HFS was really rare or what. Thanks in advance for any help.

Regards from Aloha, Oregon,
Liles Garcia
naomi@ftconnect.com

Message-Id: <200001100732.CAA29281@flash.naxs.net>
From: "Barry L. Ornitz" <ornitz@tricon.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Q: Restoration of finish - bakelite knobs?
Date: Mon, 10 Jan 2000 02:32:19 -0500

Introductory note to the group...

My message to Greg was sent directly to him and not to the group. Since he has seen fit to post my message and his reply to the group, I have replied here.

+AH4AfgB+AH4-

To begin, I am not a chemist but a PhD chemical engineer/electrical engineer. Most of my polymer experience comes from 20 years of working with Eastman Chemical Company. While Eastman does not manufacture phenolic plastics, basic polymer chemistry and a huge library of technical information on polymers is available. In addition, I spent two years there working on a special project for a material to replace phenolic resins in low-end and consumer printed circuit boards. To understand how our material compared, we had to learn quite a bit about the existing phenolic chemistry and molding technology. I have also worked at W. L. Gore +ACY-Associates (any relation?) who specialize in PTFE and other fluorocarbon polymers.

To begin, if no fillers are used (actually never done), the cured polymer is completely cross-linked. This means it is one BIG molecule. It also means that it will dissolve in NO solvents. However certain materials are corrosive enough to attack its surface (particularly the exposed hydroxyl groups). With the addition of fillers, many solvents can attack underlying fillers (particularly the modern thermoplastic materials added to add impact resistance, but never found in early phenolics). One of the most common fillers is cellulose powder which will swell in water. Another early filler is mica which also swells in water. Additional early fillers include asbestos, clay, diatomaceous earth, cotton fibers and fabric, and talc. Again, most are somewhat hydroscopic. Combined with the fact that the polymerization releases water which is retained in the phenolic as

microscopic bubbles (producing voids), it is easy to see that once the resin surface has been breached that problems can occur.

Over time, the surface of a phenolic part may be worn mechanically or may react with oxygen (and especially ozone with electronic equipment) to produce a modified surface. Strong acids can also chemically modify the surface. Mechanical abrasion (including flash removal during manufacturing) can expose the fillers and microscopic water bubbles too. Oxidation reactions on the surface chemically change the surface to be more hydrophilic, again allowing water to enter the filler materials.

The use of a water-based cleaner will therefore often allow the filler materials to be attacked. But it is not the cleaner that does the attacking. The damaged surface, whether produced mechanically or by oxidation, is really responsible. You can use an organic solvent cleaner and perhaps not swell the fillers, but unless the surface is properly sealed, humidity will still enter the exposed fillers and continue to swell them. Wax may delay this action slightly but it will not stop it. You will still have to remove the wax, clean, and reapply often. Silicone waxes will be better in this regard than natural waxes. However, if you reach the point where the knob has deteriorated so far that it must be painted, the presence of silicone will virtually assure the paint will not adhere properly. Polishing with auto polish (abrasive) is temporary and only exposes more of the fillers.

Much of the properties of phenolic plastics are determined by the percentage of fillers used, the temperature of the polymerization, and the pressure under which the plastic is molded. High percentages of fillers are used to reduce cost. High temperatures and high molding pressures slow the production rate. Thus it is easy to see very real differences between samples of phenolics. For early products, particularly those before the 1950's, most phenolic manufacturers had exceptionally poor quality control. These reasons explain much of the variations you have seen between different samples.

On phenolics that have such a badly abraded and oxidized surface, I prefer to paint them. To get the paint to stick properly, it is sometimes necessary to abrade the surface even more. It is also necessary to get the skin oils and such out of the exposed filler to provide adhesion. This is where I depend on aqueous cleaners with either surfactants or caustics (such as ammonia, 409, etc.). A particularly good one to start with is Dow Foaming Bathroom cleaner which contains glycol ethers. For relatively new phenolic surfaces, using the Dow cleaner alone leaves a shiny finish since it contains some oils. I remove these with an acetone or other solvent wash before painting.

For painting phenolic surfaces, I prefer an epoxy or urethane enamel. These polymerize slowly allowing a high degree of surface leveling. They

also provide a much better oxygen barrier than any wax. Additionally they are better suited for high temperatures. I would never use lacquers unless I was willing to strip them off occasionally and reapply. Don't even consider latex paints here.

My point in my original note was that none of the cleaners does anything to dissolve or attack the actual phenolic surface. They may attack the fillers but the surface damage is already there to expose the fillers. Once damaged, the problem will only get worse +AFs-all things go bad eventually+AF0-. While organic cleaners (WD-40, kerosene) may not swell the fillers, humidity will still get to them anyway. Waxing is such a temporary fix. I prefer to spend my efforts on getting a surface to which paint will adhere properly and then use the right paint to greatly slow down future deterioration (and yes, the paint surface will also deteriorate with time, but far more slowly than the original phenolic).

In modern impact resistant phenolics, many organic solvents can attack the new fillers (such as Nylon, Rayon, Dacron, Orlon, etc.). Thus water based cleaner cause less problems with these. Most old radio gear does not fall in this category.

73, Barry L. Ornitz WA4VZQ ornitz+AEA-tricon.net

Message-Id: <3.0.5.32.20000110014746.007cfe30@proaxis.com>
Date: Mon, 10 Jan 2000 01:47:46 -0800
To: Old Tube Radios <boatanchors@theporch.com>
From: Hue Miller <kargokult@proaxis.com>
Subject: Book on VT Fuzes
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Oh, BTW, same issue of 'World War II' magazine has ad for book,

__They Never Knew What Hit Them__ by Ralph Baldwin

ad has 2 addresses for different seasons - author apparently a "snowbird" who winters in FL - so rather than repeat these, try listed URL:

www.reynierpress.com

The lower priced 'Standard Edition' is \$40. At that price, i might decline just out of a price protest - maybe i'm living in the past as regards prices - or spoiled by free info on the net....

And thanx to all who followed up my post on VT's. Very good info!
I still think it would be an interesting diversion to power up
one of these, and maybe see what kind of power input and frequency
stablility it had - but with the potting thing, i now understand
why the innards are so rare.
Hue Miller

Date: Mon, 10 Jan 2000 08:41:40 -0500
From: polepeeg@aa4rm.ba-watch.org (Marty's Refl. Drop)
Message-Id: <200001101341.IAA00434@aa4rm.ba-watch.org.>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Son of VT-F / Direct conversion?

Where'd this term come from?

An osc. modulated by an incoming sig so that the a sum/diff. sig
might be processed to advantage was the basis of Armstrong's superhet.

Stage called an "autodyne detector." RCA-8 & 28 had 'em. All
pioneer transistor sistors did too.

Seems that whenever min. parts count was an issue, the autodyne
emerged. Check the VT-FUZE.

Then came the HW-8, The Century 21, the ARRL, & hamb-dum. Goodbye
Autodyne, INTRODUCING "Direct Conversion!!!"

Did the equivalent term "direct conversion" emerge in Newington?

From: KB9VU@aol.com
Message-ID: <33.3336b80d.25ab3c05@aol.com>
Date: Mon, 10 Jan 2000 08:43:33 EST
Subject: Collins S Line For Sale
To: Old Tube Radios <boatanchors@theporch.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

I have a CCA VG Collins S Line station for sale.

Package consists of the following:

- Collins 75S-3B Receiver, Round Emblem, Plastic Trim Ring and Finger Hole.
Late
production with one filter, filter cover and T-9. Serial number 17789.

- Collins 32S-3 Transmitter, Round Emblem, Plastic Trim Ring and Finger Hole.
This

unit has been modified with the addition of a UHF SO-239 connector on the rear

chassis in place of the standard Collins phono plug. Serial number 101300.

- Collins RE 516F-2 Power Supply. Unmodified. Serial number 59201.

- Collins RE 312B-4 Station Console. Serial number 62535.

- SM-1 Dynamic Microphone.

- Basic interconnect cable set for the station.

- Original 32S-3 manual. Original 75S-3B/C manual. Copy of the 516F-2 manual.

Copy of 312B-4 manual.

Price for the package cleaned and aligned: \$3500 plus shipping from 63033.

This is a nice working station for someone interested in getting a complete, late manufacture S Line.

Mike Stover, KB9VU

Florissant, MO

(314) 831-8174

Date: Mon, 10 Jan 2000 06:08:29 -0800

From: Arden Allen <gumbear@pacbell.net>

Subject: Re: Son of VT-F / Direct conversion?

To: Old Tube Radios <boatanchors@theporch.com>

Message-id: <0F0400EPFHYNEM@mta3.snfc21.pbi.net>

MIME-version: 1.0

Content-type: text/plain; charset=ISO-8859-1

Content-transfer-encoding: 7bit

Hi Marty;

> An osc. modulated by an incoming sig so that the a sum/diff. sig

> might be processed to advantage was the basis of Armstrong's superhet.

>

> Stage called an "autodyne detector." RCA-8 & 28 had 'em. All

> pioneer transistor sistsors did too.

Another common usage of autodyne detectors was as a converter in cheap consumer FM sets. One of the most common was the use of a 6AQ8 dual triode, one triode was the RF amp and the other was the autodyne converter.

These were usually found in imported (from Germany) tuner modules, eliminating the requirement for a manufacturer to know how to design a decent front end for a cheap product. I have a Zenith AC/DC AM/FM table radio that uses a 12DT8 dual triode in a similar arrangement. The 12DT8 is merely a 12AT7 with a shield between the two triodes.

Arden Allen KB6NAX Vallejo, CA gumbear@pacbell.net

Message-ID: <001801bf5b75\$8bf73b00\$4464e7d0@sandy-s-pentium>
From: "Sandy W5TVW" <ebjr@i-55.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: VT fuze - again
Date: Mon, 10 Jan 2000 08:11:25 -0600
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

>The tubes are weird sub (and subsubminis). I know a man that
worked in
>the tube labs at Sylvania, and he has quite a few of the things.
I am not
>sure of the numbers - maybe I will get some next time I see him.

Seems like I remember reading somewhere, that it was Raytheon
that developed
the flat inline-pin subminiature tube. I do know that the
hearing aid industry and
Motorola "Walkie-Talkies" (the pack sets with the telephone
handset on top.)
used the daylights out of sub-minis and Raytheon made most of
them. Some
of the ones I saw in the Air Force (1AD4's, etc) were made by
Tung-Sol.
RCA and GE made a raft of round circular 8 pin subminis and used
them in
a raft of stuff they designed. The ARC-34 radio comes to mind as
well
as an SRR-13? receiver the Navy used for a while.

73,
Sandy W5TVW

Message-ID: <3879F953.F9F80708@erols.com>
Date: Mon, 10 Jan 2000 10:22:59 -0500
From: David Jordan <wa3gin@erols.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Q: Restoration of finish - bakelite knobs?

Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

What about using these new clearcoat sealers (3M Gloss Enhancer) that spray on clear and buff up to enhance the depth of the shine? They aren't wax and appear to last a very long time...

thanks,
dave

Message-ID: <20000110153030.23096.qmail@mellon.com>
From: Merz Donald S <merz.ds@mellon.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: RE: Q: Restoration of finish - bakelite knobs?
Date: Mon, 10 Jan 2000 10:26:48 -0500
MIME-Version: 1.0
Content-Type: text/plain

There is a product made and sold in the UK specifically for Bakelite polishing. I forget the manufacturer. But the product is called Bak-o-brite. One of the UK members of this list used to offer it for sale to those of us stranded in the colonies, at I think, 2 containers for \$10 including mailing. What say, UK listers, does any of this ring a bell?

73, Don Merz, N3RHT

> -----Original Message-----
> From: David Jordan [SMTP:wa3gin@erols.com]
> Sent: Monday, January 10, 2000 10:23 AM
> To: Old Tube Radios
> Cc: Old Tube Radios
> Subject: Re: Q: Restoration of finish - bakelite knobs?
>
> What about using these new clearcoat sealers (3M Gloss Enhancer) that
> spray on clear and buff up to enhance the depth of the shine? They
> aren't wax and appear to last a very long time...
>
> thanks,
> dave

From: KB9VU@aol.com
Message-ID: <76.76cf8454.25ab5d84@aol.com>
Date: Mon, 10 Jan 2000 11:06:28 EST
Subject: R390A FS
To: Old Tube Radios <boatanchors@theporch.com>

MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

I have a Chuck Ripple restored R-390A in a new shipboard cabinet for sale. This is an EAC unit SN 5591. The cabinet is a CY-979A.URR SN 2055. Has one small scratch on the front panel that can be touched up. Otherwise it is as I received it from Chuck.

Radio is surplus to my needs as I have acquired an original Collins Manufacture unit that is in daily use.

\$1200 plus crating & shipping from 63033. Pick up is preferred and I can drive a bit to facilitate that. Located near St. Louis, MO

Mike, KB9VU
(314) 831-8174

Message-ID: <387A0379.EDBB473@inwave.com>
Date: Mon, 10 Jan 2000 10:06:17 -0600
From: Paul Monroe <pmonroe@inwave.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Capacitor Leakage - How much?
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Denis,

Most manufacturer's catalogs specify the leakage in terms of $\mu\text{A}/\mu\text{F}/\text{Volt}$ at rated voltage. For example, in the latest Digi-Key catalog Panasonic Type FC capacitors are specified as follows:

Leakage = $< .01\text{CV}\mu\text{A}$ or $3\ \mu\text{A}$, whichever is greater, measured 2 minutes after application of rated DC working voltage. A $40\ \mu\text{F}$ 100V cap should have less than $40\ \mu\text{A}$ of leakage according to this formula.

This rating is for a modern capacitor. Older capacitors may have much more leakage than this and still be good.

The best source for a leakage rating is the manufacturers spec sheet for the capacitor.

Hope this helps.

73,

Paul, W9MEH

Date: Mon, 10 Jan 2000 11:33:52 -0500 (EST)
From: Paul Bernhardt <bern@ppdu.nrl.navy.mil>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Loveland Colorado Hamfest Report
Message-Id: <Pine.A32.4.03.10001101118520.16866-1000000@ppdu.nrl.navy.mil>
Mime-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Gang,

I was at a business meeting in Boulder Colorado so I decided to go to the Loveland Hamfest on 8 January. The Hamfest started at 9AM but I could not arrive until 11 AM. I was amazed by all the boatanchor related equipment at the Flea Market. Just inside the entrance, Chuck Felton, KD0ZS (feltoned@coffey.com; www.feltondesign.com) had a nice displays of R390A and R390 receivers with a handout for improving to the BF0 for SSB reception. At the other tables I purchased the following bargains:

FB-7 (40-meter coils only) for \$50
ARR-2 for \$10
AM-300 (NIB 2 each) for \$15
TBY for \$10

Clearly hamfests are the best places for low prices.

Cheers, Paul Bernhardt

Work: P.A. Bernhardt	Home: Paul Bernhardt, KF4FOR
Code 6794	5704 Ridge View Dr.
Naval Research Laboratory	Alexandria, VA 22310
Washington, DC 20375	
Tel: 202-767-0196	703-960-9656
FAX: 202-767-0631	

Date: Mon, 10 Jan 2000 12:03:37 -0500
From: "ROBERT W. DOWNS" <RWDDowns_WA5CAB@compuserve.com>
Subject: BC-611 IF Transformer Problems
To: Old Tube Radios <boatanchors@theporch.com>
Message-ID: <200001101204_MC2-9407-5C05@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: quoted-printable
Content-Type: text/plain;
charset=ISO-8859-1
Content-Disposition: inline

Group,

A couple of you mentioned open winding problems with BC-611 IF transformers. This is a fairly common problem with the double-slug tuned IF's in the BC-611-F, but I don't think that I ever encountered it in the double or single trimmer type IF's in the BC-721 and BC-611-E and earlier. =

Apparently some of the NATO countries who continued to use the BC-611 long after the US retired them ran into the problem as well. I've had a number of BC-611-F chassis in which one or both of the IF transformers had been replaced with the earlier double-trimmer type 1st IF transformers (the 2nd IF single trimmer type won't work). They work fine, and you don't have to fight the problem of broken slug adjustment slots.

Robert Downs
WA5CAB
Houston

Date: Mon, 10 Jan 2000 12:03:39 -0500
From: "ROBERT W. DOWNS" <RWDDowns_WA5CAB@compuserve.com>
Subject: Re: VT-fuze - again
To: Old Tube Radios <boatanchors@theporch.com>
Message-ID: <200001101204_MC2-9407-5C08@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: quoted-printable
Content-Type: text/plain;
charset=ISO-8859-1
Content-Disposition: inline

Hue & Group,

It's been a long time since I read the details on the VT-fuze but my recollection is that the doppler sensing allowed CPA determination. =

I was an ET before I transferred to the Mine Force in 1977, not an FT, but I seem to remember that the MK-37 and its director and the 5"/38 Dual Purpose Twin Mount were somewhat of a package deal. So the MK-37 stayed =

in
service as long as the 5"/38 did. I'm 99% sure that as late as 1977 (last
time I was aboard), USS Robert A. Owens (DD-827) still had both. I was
told that it didn't make any sense to design a new fire control radar for
the 5"/38 that was capable of tracking supersonic aircraft because the gun
itself wasn't up to it. This was the main reason for the design of the
5"/54 gun, which turned out to be a poor gun for shore bombardment. And
of course that's what they were mostly used for!

Message text written by Hue Miller

>Say, boys and girls, i was reading in the Feb 2000 issue of
"World War II" magazine, an article, "The 5-inch/38-cal. gun and
the Mk37 fire control system proved an effective combination for
the US Navy", page 8.

A couple statements therein give me pause, viz.,

"The fuse [sic. why this elementary mistake?] contained a =
miniaturized electronic transceiver that detonated the fuse
by pulse Doppler detection techniques."
<

"The only surviving Mk37 systems and their Mk25 radars are on
the decommissioned Iowa-class battleships and aboard many =
former U.S. destroyers now serving in foreign navies."

Gee, what nation's navy would still be running radars from =

WW2 ? Even if the country was that backward, that they
had to use such radars, how could they hope to cope with
today's weapons with such radar? How could they afford -or
find - vacuum tube trained radar technicians?
<

73,
Robert Downs
CW04 USNR Retd.
WA5CAB
Houston

Message-ID: <002f01bf5b8d\$4f3430c0\$2c1899c2@oemcomputer>
From: "Andrew Emmerson" <midshires@cix.co.uk>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Q: Restoration of finish - bakelite knobs?
Date: Mon, 10 Jan 2000 16:23:41 -0000
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

> There is a product made and sold in the UK specifically for Bakelite
> polishing. I forget the manufacturer. But the product is called
Bak-o-brite.
> One of the UK members of this list used to offer it for sale to those of
us
> stranded in the colonies, at I think, 2 containers for \$10 including
> mailing. What say, UK listers, does any of this ring a bell?

Yes, I have mentioned this before and I still have stocks. "Baykobrite" is
just a funny name that someone coined for it; the real name is "Paste,
Polishing No. 5" and that's the name that the factory sells it under.

It is a paste rather like toothpaste with a mild abrasive (probably the
diatomaceous earth or fumed silica that Barry Ornitz has mentioned) mixed up
with a waxy solvent. It was formulated by our national telephone operator
for polishing the cases of Bakelite telephones and it does work well on
Bakelite that has not deteriorated too badly. I have never had a customer
who was dissatisfied with the stuff and can still supply it (e-mail me
privately, credit cards accepted!).

The manufacturer also does a plastic polish that smells strongly of camphor;
this was first made during WW2 for taking the haze off the Perspex
(polymethyl methacrylate and called Lucite in the USA, I think) visor domes
of Spitfire aircraft. It's a cloudy white liquid with a frothy, squidgy
substance suspended in it that tends to settle in the bottom of the bottle.
Whatever it's made of, I can certainly say it works great on these acrylic
plastics, including the more modern thermoplastics such as ABS (what
telephone cases are made of today). It actually dissolves away surface
scratches and even shallow gouges (don't ask me how though!). The camphor
smell may give Barry a clue what it's made of; I'm sure you must have the
same stuff in North America, probably under a different name.

73,
Andy G8PTH

End of BOATANCHORS Digest 2774
